

MONITORING PLAN:

A monitoring program will be implemented following establishment of the mitigative areas. The monitoring program will document hydrology, vegetation, and soils where applicable in accordance with the U.S. Army Corps of Engineers three parameter approach. The General Wetland Mitigation Monitoring Requirements prescribed by the Ohio Environmental Protection Agency will be followed. A copy of the official description of this program is included for reference on Page -M-10- of this attachment. The stream and impoundment monitoring programs will document the Q.H.E.I. score for the stream, the hydrology, and the vegetation for the impoundments. Monitoring will identify problems and potential problems and develop remedies as required.

In addition to the reporting procedure required by the general wetland monitoring document mentioned in the previous paragraph, reports will be submitted to the Pittsburgh District of the U.S. Army Corps of Engineers, 1000 Liberty Avenue, Pittsburgh, PA 15222-4186. The report will be based upon monitoring completed during the growing season. These reports will be submitted annually for a period of five years following completion of reclamation. They will be submitted on or before August 31 for the year of review. Reports will be based upon wetland sampling points described in the Ohio E.P.A. policy previously referenced; upon single sampling points for each deep water habitat; and upon two sampling points for each stream. These points will be identified in the field so that the same points can be used for each periodic observation. The reports will also include photographs which will be taken from the same point of view for each report. These viewpoints will also be identified in the field so that they can be used on a continuing basis.

Survival rates expected for all mitigative vegetation during the five year establishment period are:

Year 1	50%
Year 2	60%
Year 3	70%
Year 4	80%
Year 5	90%

Water sampling will be incorporated into the wetland monitoring plan. This will also be done in accordance with the Ohio E.P.A. guidelines previously referenced. Stream water sampling will also be carried out in accordance with Ohio Department of Natural Resources requirements.

Observation and photo view point identification markers will be established so that conformance with the requirements of the guidelines can be assured. These markers will consist of steel fence posts driven into the ground. Both sets of points will be identified and numbered so that continuity between observation and reporting periods will be assured.

Wetland, stream, and impoundment development will also be monitored by the Division of Mines and Reclamation personnel as part of the reclamation monitoring which this organization normally carries on.